End User Frequently Asked Questions:

Q: Which skin type can we treat with iPulse?

A: **All skin types from Fitzpatrick I to IV.** As there is also melanin in the epidermis (giving the skin its natural colour), care must be taken to select appropriate energy levels to induce the desired therapeutic outcome without damaging surrounding normal tissue. Darker skin will require lower energy levels.

For Hair Removal treatments:
Darker skin can react to light treatment by hyper- or hypo-pigmenting so it is best treated with a longer pulse width (time span) to spread out the energy and make the treatment safer and more comfortable. This means either using a higher number program in the single shot section (e.g. program 7 or 8) or go to multi-pulsing (e.g. program 10, 12 or 16).
As the skin colour darkens, the energy range should stay in the same region however triple pulses should be used to allow inter-pulse epidermal cooling. Programs 10, 12 and 16 should be utilised for skin types 4 to 5.
Sin type VI cannot be treated.

For pigmentation component:
Since IPL devices with wavelengths in the 530 - 1200 nm range are often successful in treating superficial epidermal pigment in Fitzpatrick Skin Types I-IIIa, it is usually **assumed** that similar results are achievable with darker skin phototypes. However, Types IIIb, IV and V are very problematic as the increased level of 'naturally occurring' epidermal melanin, competes with the pigmented lesion (typically sun and age spots) which may lead to either no improvement or increased risk of hyper- or even hypo-pigmentation.
So it is best treated with a longer pulse width (time span) to spread out the energy and make the treatment safer and more comfortable. This means using a multi-pulsing program.

For vascular component:
When treating vascular abnormalities with iPulse IPL, the skin colour is more important than the vessel size (which is notoriously difficult to determine anyway). Darker skin can react to light treatment by hyper- or hypo-pigmenting so it is best treated with a longer pulse width [time span] to spread out the energy and make the treatment safer. This means using a higher number program in the single shot section or go to multi-pulsing. The multi-pulsing programs have the added advantage of also having gaps between the pulses allowing a cooling time for the epidermis. The total amount of energy delivered remains pretty much the same.
Skin types I to IV only can be treated.

Q: Can we treat white hair / lighter hair with iPulse?

A: **No / Not easily.** The general rule is that the hair colour should be darker than the skin colour. Treatment is most effective when there is good contrast between the hair colour and skin colour – making black hair in pale skin the ideal combination to treat.
Lighter hair respond less well as there is very few melanin in the hair shaft, which means few chromophores for energy absorption by the pigment. Lighter hair will require higher energy levels.
White or un-pigmented vellus hair will be unaffected.

Q: Can we treat clients who are pregnant with iPulse?

A: Clients who are pregnant are not ideal for treatment because pigmentary and hormonal changes that can occur during the pregnancy may reduce the treatment effectiveness. It is best **not** to treat until periods return and the end of breast feeding.

Q: How many treatments are needed for hair removal treatment with iPulse?

A: Experience has shown that multiple treatments are required for hair removal with intense pulsed light (IPL). This is due to the nature of the hair growth.
Hair grows in a cycle of 3 phases. Anagen phase is the growth phase of the hair. The Catagen phase is a brief portion of the hair growth cycle in which the growth stops. The Telogen phase is the dormant phase of the hair. Hair can only be treated successfully during the ANAGEN phase because of the higher melanin content and the proximity of the dermal papilla.
This is why an average of 4 to 8 sessions is needed for hair removal treatment in order to treat the whole area. 4 to 10 weeks is the gap between sessions depending on the new growth and the body area. Some areas will require more than 8 treatments.
The hair growth cycle varies in different areas of the body by ethnic origin, age, hormones. Depending on these factors some clients may need more or less treatments because each individual will respond differently to treatment.

Q: Is it possible to remove hair on tattooed skin? – How do you do it with iPulse?

A: You ***can*** remove hair on tattooed skin if the tattoo is light in colour but it is inadvisable because you have to anticipate some side effects from light energy absorbed competitively by the tattoo ink and there may be some pain and fading of the tattoo.

Q: Why and how to carry out a test patch with iPulse?

A: Test areas are required and are described in detail in the following section in order to establish the best starting iPulse energy level and to reduce the risk of unwanted side effects from over-treatment. A test patch is a small trial in the treatment site itself or in an area with similar hair and skin to the treatment site.
It is normal for the client to experience at least a sensation of warmth or heat during each shot or a 'ping' like the flick of a rubber band on the skin. It is recommended that test-areas be evaluated on or near the treatment site using the lowest recommended fluence for the skin type, increasing the fluence if necessary until the client feels a 'ping', heat or mild discomfort (according to the individual's pain tolerance). Assess the immediate response and record the treatment parameters in the client record. If in any doubt, do not perform a treatment.
When performing the first test area on a new client you have only 1 – 3 chances to establish the energy level.
For hair removal treatments:
On lighter skin (Types I/III), start with one shot at the lowest energy level predicted by skin type, then one shot 1 J/cm^2 above the lowest predicted energy level and lastly 2 J/cm^2 higher than the lowest predicted energy level to evaluate tissue response.
Example: According to "Typical Treatment Parameters" (section above) a Skin Type 2 with hair of medium thickness would need Program 5 predicting a start energy of 12.0 J/cm^2 so, you choose energy levels: 12.0 J/cm^2, 13.0 J/cm^2 and 14.0 J/cm^2 for the test area.
On darker skin (Types IV/V), start with one shot 0.5 J/cm^2 below the lowest energy level predicted by skin type, then one shot at the lowest predicted energy level and then one shot 0.5 J/cm^2 above the lowest predicted energy level to evaluate tissue response.
The following points should also be observed when performing test areas:

- To be carried out on all patients before a full treatment commences
- The area to be treated needs to be clean, free of cosmetics and creams
- The aim of test shots is to determine the most effective fluence settings for the patient skin type and size of area without causing any adverse reactions
- Only a small area (3 or 4 shots in darker skin types, a few more in fair skinned patients) should be treated. If possible this should be in an area that is not too obvious but representative of the proposed treatment area

- Usually 3 settings are required
- Patient, operator and anyone else in the treatment room must wear appropriate IPL safety eye-wear before treatment commences
- The applicator's contact crystal (light guide) must be held flat on the surface being treated with the contact crystal firmly touching the skin tissue
- Test area treatment should be ceased immediately if side effects occur
- Patients must be given clear instructions on post IPL skin care, in particular sun avoidance and avoidance of injury to the skin.

Details of the treatment performed including treatment area, IPL type, program, pulse width, fluence and number of shots should be accurately recorded in the client's record. The entry should be signed, timed and dated. The IPL treatment register (log book) must be completed recording treatment in the same way.
With Skin Types I/III ask the client to return in 3 – 7 days for final evaluation and treatment. Skin Types IV/V should wait for 14 days to be sure of no late emerging side effects.

Q: Should I use cooling gel with iPulse?

A: A layer (2/3 mm) of chilled (+4°C) gel is used to help transmit light through the rough stratum corneun layer into the skin and to give a cooling effect.
Gel allows the user to see the area treated and to ovoid overlapping. Care should be taken not to overwork the gel on the skin, as it will heat up. Do not reuse the gel.
The gel you use must be completely clear and colourless. The gel should be kept cold but not frozen.

Q: Is iPulse treatment painful?

A: It is normal for the client to experience at least a sensation of warmth or heat during each shot or a 'ping' like the flick of a rubber band on the skin. Treatment should **not** be painful – if it is stop treating and re-assess parameters and client history. If in any doubt, do not perform a treatment.
Darker skin types retain heat longer than pale skin types and require the use of cooling gel packs to soothe and protect the skin before and after treatment.
Areas that have a greater hair density can be more uncomfortable than other treatment areas because of the high level of melanin. Care should be taken with the energy settings when treating over bony areas which are more sensitive.

Q: Can the client remove hair between iPulse treatments?

A: You must advise your client not to pluck or wax between treatments because these methods pull the hair (main target) from the follicle. Your client can shave hair between treatments. Treated hair will shed naturally 7-14 days after iPulse.

Q: Can we treat male clients with iPulse?

A: Men are suitable for iPulse treatment. As hair density and hair thickness can be different from a female client for the same skin type, care should be taken on the choice of the parameters. Most typically, men request beard re-shaping to reduce hair growth on the lower third of the neck where shirt collars rub and leads to soreness following shaving and in-growing hairs and inflamed/infected hair follicles (pseudo-folliculitis barbae—PFB). Care should be taken on the lower third of the neck because this area is delicate and does not heal as well as facial areas if over-treated.
First treatments of the beard in this area should be cautious as there may be a lot of hair, which means a lot of melanin and consequently a lot of heat / discomfort generated in the IPL treatment. It is one of the areas where the use of reusable cooling gel packs (kept in the fridge—not frozen) can be helpful both for about a minute or two before treatment (to reduce

level of discomfort) and afterwards to draw out heat from the area and reduce inflammation. Post treatment application of Aloe Vera or other calming lotion is desirable. Results of treatment can be excellent in this area and much appreciated by the client.

"Spot" clearing of hair on the upper cheeks can also be undertaken but full clearance of the beard is not advisable except in gender reassignment cases ("he to she") since complete removal of the beard changes facial masculinity characteristics and makes the face look more feminine. Complete loss of male facial hair can also result in certain premature ageing characteristics emerging (as occurs in women) such as upper lip "whistle lines".

Unwanted chest hair growth in male clients can be treated easily taking care with energy settings as the chest bone (sternum) is close to the body surface in this area and may be sensitive.

Q: What are the contraindications for iPulse hair removal treatments?

A: Do not treat anyone who has known or reported:

- tanned skin (active tan) through sun exposure or tanning bed use in the previous 30 days (because of increased risk of hyper pigmentation)
- waxing, plucking, 'sugaring' or 'threading' depilation treatment of the area in the previous 4 – 6 weeks (because the follicle has been removed)
- hypo pigmentation (e.g. Vitiligo)
- any inflammatory skin condition e.g. eczema, active Herpes Simplex, etc. at the treatment site (because it may aggravate the condition)
- skin cancer or any other cancer and / or who reports he/she is undertaking any cancer drug therapy (such as Ducabaxine, Flurouracil, Methotrexate, etc.)
- a history of keloid scarring (because any IPL burn may produce a keloid scar)
- epilepsy (because repeated consecutive flashes may induce a fit)
- using St. John's Wort (herbal remedy) in the past 3 months for depression (owing to photosensitivity)
- who has used Isotretinoin—Roaccutane or Tretinoin—Retin A in the previous 3 – 6 months for the treatment of acne or other dermatological conditions
- who is pregnant; until periods return and end of breast feeding (because hormonal imbalance may reduce treatment effectiveness)
- who takes drugs for diabetes (owing to possible photosensitivity and poor wound healing)
- taking anti-coagulant drugs (e.g. for heart disease)
- taking any topical medication (e.g. hydrocortisone) or is wearing perfumes, deodorants, sun block, essential oils or other skin lotions (which could cause photosensitivity)
- surgical metal pins or plates under the tissue to be treated
- to be under 18 years of age if the establishment is not registered to treat children or if parental permission is withheld.

A doctor's letter should be obtained before treating clients who are reportedly using Quinidine, any anti-psychotic medication or large combinations of cardiac / diuretic drugs, topical steroid creams in the area to be treated, general anaesthesia in the last 3 months, local anaesthetic treated areas in the past month or where you are uncertain about any reported medical condition or medication.
Treat with caution and obtain a doctor's letter if you are uncertain about anyone who has fake tan, suffers with allergies, has hormone abnormalities such as polycystic ovarian

syndrome, has cold sores in the treatment area, has had previous depilation treatments or has reported HIV or Hepatitis.
Transsexuals may be treated although results can vary and **iPulse** treatment should follow 6 months after completion of hormone therapy.
Conditions that affect hormone levels such as thyroid conditions, oral steroids, hormonal therapy and polycystic ovaries can be treated but results may vary and clients should be made aware of reduced or delayed realistic outcomes. [See separate Information on Drug-Induced Photosensitivity in *iPulse User Manual* Appendix].

Q: What advice do I give to clients before iPulse hair removal treatment?

A: Clients should be instructed in pre-treatment skin care and should be provided with written take-home instructions recommending:

- Don't expose skin to UV (sun exposure or the use of tanning beds) or self tan for at least 4 weeks before and/or between IPL treatments,
- don't depilate with waxing, plucking or threading (shaving or depilatory creams are acceptable) before and/or between IPL treatments,
- don't use bleaching creams, or perfumed products (e.g. aromatherapy oils) for 24 – 48 hrs before treatment sessions,
- avoid swimming in strong chlorinated water immediately before an IPL treatment session,
- avoid exfoliating, microdermabrasion or peels for 1 week before treatment sessions,
- avoid wearing tight clothing when attending for treatment sessions,
- keep the area clean and dry,
- hydrate the body by drinking plenty of water and
- protect the skin from sun exposure with suitable clothing and use of sun block SPF 30+ before first treatment and between subsequent treatment sessions but do NOT use sun blocking creams within 24hrs of scheduled treatments.

NB. Hot and humid weather conditions can aggravate skin in the period immediately before treatment.

Q: Which area can be treated with iPulse?

A: Most areas can be treated if the hair and skin type are suitable but you should not treat very close to the eyes or over the mucous membranes such as in intimate areas or in the nose or ears.
In the area to be treated, white out small lesions, moles… and cover any sensitive area (tattoos, mucous membranes) with cut-out adhesive white labels to protect them from absorbing light energy.
Do not treat the edge of eyebrows for shaping reasons where angled growth of hair follicle may lead to unwanted reduction / damage to the eyebrow contour.

Q: What is the collateral damage caused by iPulse?

A: "Collateral damage" can be interpreted as meaning significant unwanted damage to surrounding tissues resulting in untoward side effects of a temporary or permanent nature. Properly used by a trained operator following CyDen's expert clinical treatment protocol, there will be no such unwanted side effects. Please refer to the iPulse treatment protocol / training manual for details of how to avoid or deal with treatment related problems and side effects.
There is of course an implicit intention to cause **specific** "collateral damage" when using any laser or IPL. For example, by targeting the hair shaft as the main melanin-containing chromophore, it is intended through correct selection of pulse program to generate sufficient

thermal energy absorption in the hair shaft to heat up the entire hair follicle such that "collateral thermal damage" is done to the germinative cells close to the outer sheath of the follicle and in the so-called "bulge" to prevent or significantly reduce the possibility of hair regrowth. This is the result of intended "collateral damage".
In the case of treating vascular abnormalities such as thread veins, the intention is to thermally coagulate fine vessels through light energy absorption in oxyhaemoglobin so that the delicate vascular endothelium (inner wall of the blood vessel) is irreparably heat-damaged resulting in vessel spasm / collapse or coagulation followed by resorption of the treated tissue and erasure of the unwanted vessel.
The "collateral damage" resulting from the treatment of fine vessels is the release of inflammatory mediators and cytokines that in turn cause an increase in P3NP pro-collagen levels and subsequent formation of new collagen. The hoped-for result in photorejuvenation is that this new collagen stimulation will improve the appearance of skin texture, reduce pore size and erase some fine lines. This process can typically take several months to develop fully following iPulse treatment.

Q: What are the long term results seen with iPulse for hair reduction?

A: There are no published long term results yet from iPulse hair reduction treatments. Clinical trials were started nearly two years by Dr Mario Trelles in Spain, which are being collated for future publication in his multi-centre hair removal study. Early published data indicates that iPulse performs similarly well to both alexandrite laser hair removal and hair removal by other leading IPL devices. The FDA in USA accepted data provided by CyDen to demonstrate equivalence and this resulted in the granting of FDA 510k clearance for "long-term stable or permanent hair reduction". Typically, 6-8 treatments will result in an 80-90% clearance of hair with follow-up treatment once or twice a year to maintain clearance. Longevity depends on hormonal activity levels, particularly in women patients. Patients with underlying medical conditions that are hormonally driven – such as PCOS – will provide positive results but more treatments will be required and follow-up treatments will be needed sooner.

Q: If 3-4 treatments are carried out at monthly intervals, what is the level of hair reduction seen on the same spot using iPulse?

A: See above. However, remember the different lengths of hair growth cycles, e.g. legs vs facial hair. Treatments on the face can follow as frequently as every 2-3 weeks while treatments on the legs more frequently than every 8 weeks are probably pointless because of the length of the telogen phase (see training protocol / manual).

Q: Is there any chance of post inflammatory pigmentation in type 4 & 5 skin using iPulse?
A: Normally, there is only a chance of **post-inflammatory hyper-pigmentation** (in Fitzpatrick skin types 1-5) where **serious skin injury occurs** not simply because of IPL treatment. It is generally a greater risk in darker and particularly Asian skin types where epidermal pigmentation is much more common than vascular blemishes. Post inflammatory hyper pigmentation is most often seen in the following cases:

1. after healing has occurred, following traumatic or chemical injury or following acne, eczemas, contact dermatitis etc.
2. drug induced pigmentation.
3. pigmentation due to long-term use of cosmetics especially those containing fragrances.

Typically it may comprise increased melanin deposition at the dermal-epidermal junction or hemosiderin deposits, left behind by degraded red blood cells (RBC's), creating the typical brown discoloration.
When using iPulse following the treatment recommendations in the Training Manual, the risks of **transient hyperpigmentation** can be minimised. Such transient hyperpigmentation is a

side effect of over-treatment and almost always resolves within several weeks to several months in severe cases. Sun protection creams, protective garments (like hats) and skin lightening creams will speed the resolution of such side effects.

Q: Is it necessary to use a firm pressure on the glass block during an IPL treatment?

A: **Where the target is pigment only** (ie NOT general skin rejuvenation) a "pressure" technique should be used. That means, the iPulse operator should use the same **firm pressure** on the applicator / glass block on the skin surface that they would use for hair removal (to lay the hair follicle over and make it easier to treat).
Compression of the skin will remove blood from the capillaries therefore reducing competition for the iPulse IPL energy. Then, even the yellow light (which is strong in an IPL) will be preferentially absorbed in the melanin rather than the haemoglobin.

Q: Should hairs be pulled out easily immediately after IPL treatment?

A: This phenomenon has been seen since the beginning of hair removal with lasers where very short pulses(0.25-1 ms) from Ruby 694 nm and Alexandrite 755 nm lasers delivered the energy so fast that the hairs came out immediately or even exploded out of the skin and stuck to the end of the handpiece distance holder! Even some users of diode lasers have seen hairs pull out easily immediately after treatment. This is a contra-indication as it shows that the hair has been heated too quickly and not enough time has been allowed for the heat absorbed by the hair shaft to conduct into the surrounding follicle to damage the hair growth cells which cause hair regrowth.

Where the hair is treated with short, very high energy pulses, the hair coagulates completely and this breaks down the keratin anchoring the hair in the follicle, thus allowing it to be pulled out easily. Where IPLs deliver very high energy in short pulses (typified by severe erythema and peri-follicular edema), this effect of early release of the hairs may be seen. However, it is **not a requirement** for effective hair removal – quite the contrary as side effects often occur at such energy levels. The Lumenis Quantum delivers 2 or more very short pulses and at high energy settings (say, 35 J/cm2) can produce this effect.

Hairs that have been treated optimally with IPL (like iPulse or DDD Ellipse) will detach from the follicle and normally be pulled out easily within 4-7 days post-treatment. Even if they don't, it does not mean that treatment was ineffective. Hair loss can be determined by computer hair counts (as Dr Mario Trelles did and showed iPulse to be similarly effective to Alexandrite laser with up to 86% clearances recorded), before/after hair counts (as Dr Omi did in Japan with 45% reduction at 30 days and 41% reduction at 90 days), before/after photography (as Dr Vedamurthy did in her Indian study and showed significant reductions with multiple treatments) or by using skin reflectance spectrometry to record total melanin content in the skin before and post-treatment (eg. Using the CyDen ChromoTest device).

The thermal relaxation time for a typical hair is in the order of 25-55 ms and these are the pulse durations used by iPulse. Effective energy to damage the follicle depends upon spot size and efficiency of the spectral profile across the IPL pulse duration. EllipseFlex has a maximum fluence of 21 J/cm2 which is almost the same as iPulse so it is not logical to say that iPulse has insufficient fluence but that Ellipse is one of the most successful IPLs in use in Taiwan!

If you want to compare speed of treatment, you have to compare treatment speed per cm2 at a particular measured fluence. The relevant spot sizes and speeds are:
Sciton BBL 2.25 cm2 or 6.75 cms (speed up to every 0.5 second but this only applies to low fluences and/or small spot size) - max fluence 30 J/cm2 DDD Ellipse 4.8 cm2 (speed every 1.5 to 3 seconds) - max fluence 21 J/cm2 Ipulse 8.9 cm2 (speed up to every second but typically every 3-4 seconds). Ellipse says on their web site that an upper lip takes 10 minutes

and legs take 1-1 1/2 hours. Ultimately, IPL treatment times are all very similar but if we want to play salesman's games we can say that we can cover an A4 sheet of paper in 1.2 to 4.6 minutes depending on the fluence (and we don't have to overlap our spots because they are so large! The Sciton 2.2 cm2 spot, even at maximum speed (ie at a low fluence) needs 2.3 minutes to cover a sheet of A4 paper and with a 10% overlap it will be at least 2.5 minutes!

In iPulse we have an effective CE medical mark IPL device at a budget price. Our distributors need to learn the differences, learn about effective treatment parameters and sell the benefits of iPulse.

Q: Why is there a delay after 50 shots with my iPulse unit?

A: CyDen has automatic short cooling cycles integrated into the software to ensure smooth running of the system. The cooling period is short and usually coincides with a need for repositioning the client or the need to prepare a new area with cooling gel etc. As time goes on these cooling delays will get shorter in future software upgrades or disappear altogether as our experience with treatment patterns increases.

Original cooling cycles global to both I200 and I300 throughout 2005:

Short Cooling Cycle after 50 shots = 2mins 43secs approx

Extended after 250 shots =4~6mins 30secs approx

Revisions to cooling cycles as continuous improvement:

Short Cooling Cycle after 50 shots = 43secs approx

Extended cooling after 250 shots = 3mins 37secs approx

Q: What after care advice should I give to my iPulse client?

A: Clients should be instructed in post-treatment skin care and should be provided with written take-home instructions recommending:

- Don't expose skin to UV (sun exposure or the use of tanning beds) or self tan for at least 2 weeks,
- don't shave for 48 – 72 hrs after treatment
- don't depilate between iPulse treatments (with waxing, plucking, threading or creams) unless advised by the operator to do so,
- don't use bleaching creams, or perfumed products for 24 – 48 hrs,
- don't pick or scratch the treated area,
- avoid rough handling of the area treated,
- leave any skin responses alone, these are temporary and will subside,
- avoid very hot baths / showers / steam baths / sauna for 1 week,
- avoid swimming in strong chlorinated water for 1 week,
- avoid exfoliating or peels for 1 week,
- avoid rough sports for 24 – 48 hrs,
- avoid wearing tight clothing,
- keep the area clean and dry,

- hydrate the body by drinking plenty of water and
- use of sun block min SPF 30+ and consider using protective cotton gloves for driving, a hat to protect facial areas and pants to protect legs from the sun.

NB. Hot and humid weather conditions can aggravate skin in the period immediately following treatment.
Immediately post-hair reduction treatments, effective skin cooling of the epidermis can be helpful. The use of ice or cooling gel packs, Aloe Vera gel etc., can improve patient comfort and reduce post-operative redness (erythema).

Q: How do I routinely clean the hand set and glass block?

A: OUTSIDE OF APPLICATOR & QUARTZ GLASS TRANSMISSION BLOCK
The front (skin contact) surface of the glass transmission block and surrounding plastic applicator front must be kept free of excess cooling gel using a fresh soft paper tissue during long treatments. At the end of each treatment session, clean the applicator head and docking cradle surround with clean paper tissues to avoid cooling gel drying out and sticking to surfaces. The glass transmission block itself is a delicate optical component and should also be wiped with a clean soft lint-free cloth or gauze, slightly moistened with 70% isopropyl alcohol or single use 70% isopropyl alcohol prep wipes (e.g. Chemtronics 'Optic Prep' pre-saturated wipes). to ensure that it is “optically clean” and smear-free.
WARNING: Any contamination of the glass block can lead to reduced performance or damage to the dichroic reflectance filter optical coating on the rear surface of the glass block. Care should be taken not to spill any cleaning fluids onto the unit.
INSIDE REAR SURFACE OF QUARTZ GLASS TRANSMISSION BLOCK
The inside rear surface of the glass transmission block has a delicate dichroic filter optical coating to reflect unwanted wavelengths of light and must be kept “optically clean”.
To gain best access to the rear surface of the glass transmission block for cleaning, switch on the unit and when a steady green light shows on the rear of the applicator hand set open the hand set front as for Replacement Lamp.
WARNING: Do not touch the Replacement Lamp glass or trigger wire around the lamps when inspecting or undertaking cleaning procedures.
The rear of the glass block may then be inspected carefully and cleaned as follows: The rear surface should be checked at least weekly for airborne dust or other debris and cleaned carefully with a clean soft lint-free cloth or gauze, slightly moistened with 70% isopropyl alcohol or single use 70% isopropyl alcohol prep wipes (e.g. Chemtronics 'Optic Prep' pre-saturated wipes) to ensure that it is “optically clean” and smear free. Wipe off any excess alcohol or smears with a clean, soft lint-free cloth.